



# **CERTIFICATE**

December 24, 2003

### I, Teiji MIYAGAWA

of 6th Floor, FUJI BLDG., 19, Aizumi-cho, Shinjuku-ku, Tokyo 160-0005, Japan do solemnly and sincerely declare that I am conversant with the English and Japanese languages and am a competent translator thereof, and that the attached document is, to the best of my knowledge and belief, a true and correct translation of Japanese Patent Application No. H11-244280 filed on August 31, 1999 in the name of ARUZE CORPORATION.

Teiji MIYAGAWA

Patent Attorney

Translation of Japanese Patent Application H11-244280

[Name of the Document] Specification

[Title of the Invention] GAME MACHINE

[Claims]

- 1. A game machine comprising:
- a display means for displaying game-related designs including a special symbol indicating a shift to a special game state if a variation display stops at a specific arrangement, and including a production design indicating a probability of shifting to the special game state; and

a control means for controlling a display on the display means; the control means being constituted to control the display means performing a suggestion display of relationship between the production design and the probability of shifting to the special game state.

- 2. A game machine according to claim 1, wherein the suggestion display indicates which production design has a high probability of shifting to the special game state.
- 3. A game machine according to claim 1 or 2, wherein the suggestion display shows a design identical to the production design or one relating thereto.
- 4. A game machine according to any one of claims 1 to 3, wherein the suggestion display is performed with an animated image.
- 5. A game machine according to any one of claims 1 to 4, wherein the suggestion display is shown when the game is not played or when the

variation display of the special symbol is not shown.

6. A game machine readable recording medium recording a game program, wherein the game program gives the game machine a function of permitting a player to play a game while displaying game-related designs including a special symbol indicating a shift to a special game state if a variation display stops at a specific arrangement and including a production design indicating a probability of shifting to the special game state, and a function of performing a suggestion display of relationship between the production design and the probability.

[Detailed Description of the Invention]

[Technical Field of the Invention]

This invention relates to game machines such as a pachinko game machine (pinball-like game machine of Japanese origin) comprising a display means for displaying game-related designs and control means such as a microcomputer for controlling the display.

[Conventional Art]

[0002]

A type of pachinko (spring-driven steel ball) game machine has been on the market, in which a display means is provided to show variation display of symbols when specific conditions are met, and advantage is given to the player if the variation display stops at a specific combination of the special symbols. In recent years, many electric display devices are used such as liquid crystal display devices capable of showing various production (dramatic) displays. [0003]

The above mentioned production displays are, for example, to make a new character separate from the symbol displayed by the variation display appear, or to make the player feel that the time of a big hit is near, by a display (pre-big-hit (Reach) production or Reach action) made separately from the ordinary display of the varying special symbols when a condition of a Reach, where a big hit would happen with one more stop of the special symbol, is reached. Anyhow, they enhance the fun of the game.

[0004]

It is also devised to enhance the player's feeling of expectations about the result of the game. In the arrangement, magnitude of Reach evolution probability indicating whether a Reach production appears or big hit probability is indicated with characters and their combinations caused to appear during the variation display, and the big hit probability is indicated with the pattern of the Reach production displayed.

[0005]

[Problem to be solved]

In recent years, however, a genre of game machines like amusement machines are gaining popularity with which players can enjoy not only the thrill of winning or losing benefits but also the contents of games with features of arranged displays intensively devised with variety of ideas for making games interesting. As a result, the production displays are becoming more diversified year by year and so the beginner players are experiencing more difficulty in understanding the contents. In other words, even if information such as big hit probability favorable for the player is displayed by the production display, the player might not notice it and overlook it. [0006]

For example, in Japanese Laid Open Patent Application H2-124191, a game machine is described which displays messages in characters such as "Welcome" and "Go, go, go" on a variable display device of the dot matrix type. However, such a message display does not help the player understand the contents of arranged displays indicating the above-mentioned big hit probability or pre-big hit evolution probability.

#### [0007]

Another one is disclosed in Japanese Laid Open Patent Application S61-172572, which, when the game is not being played, visually informs the player of what kind of game state represents a big hit by demonstrating the display contents such as "Fever" (big hit) on an LED display placed on the game board surface and by demonstrating the operating state of the prize ball receiver or the like on the game board surface when the game is in a big hit state or the like. However, this also does not go so far as to help the player understand the contents of arranged displays indicating the above-mentioned big hit probability or pre-big hit evolution probability.

#### [0008]

Some of the production displays include those indicating information that is favorable for the player such as "Big-hit probability is high." Some of the players enjoy finding out such a production display during the play. For such players, an explanatory display because of the difficulty in understanding the contents of the production display will detract from the fun of the game.

#### [0009]

The object of the invention is to provide a game machine capable of making it possible for a player to grasp production contents without

depriving the player of the pleasure of finding specific production display of information beneficial to the player.

[0010]

[Measures to Solve the Problem]

A first form is characterized by comprising a display means for displaying a special symbol indicating shifting to a special game state if the variation display stops at a specific state and game-related designs including a production design indicating the probability of shifting to the special game state, said display means performing a suggestion display of relationship between the production design and the probability of shifting to the special game state.

[0011]

A second form is characterized in that the suggestion display indicates which of the production designs has a high probability of shifting to the special game state.

[0012]

A third form is characterized in that the suggestion display shows designs identical to the production designs or ones relating thereto.

[0013]

A fourth form is characterized in that the suggestion display is performed with an animated image.

[0014]

A fifth form is characterized in that the suggestion display is shown when the game is not played or when the variation display of the special symbol is not shown.

[0015]

A sixth form is a recording medium having a recorded game program

with a function of permitting a player to play a game while displaying a special symbol indicating shifting to a special game state if the variation display stops at a specific state and displaying game-related designs including a production design indicating the probability of shifting to a special game state, with said function added with a function of performing a suggestion display of relationship between the production design and the probability.

## [0016]

#### [Function and Effect]

According to the first form of the invention, suggestion of the relationship between the production design and the probability of shifting to a special game state is displayed. Therefore, the player can find a specific relationship between the production design and the probability of shifting to the special game state by watching the displayed suggestion. That is, the player can play for a long period of time, without getting bored, with the pleasure of finding out from the displayed suggestions a specific production design having a high probability of shifting to a special game state and with the pleasure of discovering such a specific production design in the versatile production display actually shown.

#### [0017]

According to the second form of the invention, which of the production designs has a high probability of shifting to the special game state is suggested with a display. Therefore, the player can easily find out a production design having a high probability of shifting to the special game state.

#### [0018]

According to the third form of the invention, since suggestion display is shown with the design that is the same as or related to

the production design, the player can directly grasp the relationship between the production design and the probability of shifting to the special game state.

[0019]

According to the fourth form of the invention, since suggestion display is shown with an animated image, more concrete suggestion display is possible and the fun of finding out which is the specific production design having a high probability of shifting to the specific game state is enhanced.

[0020]

According to the fifth form of the invention, if suggestion display is shown when no game is played or no variation display of special symbols is shown, for example when a demonstration image is shown, the demonstration image can be utilized as a means for displaying important information related to games rather than being used as a mere demonstration image. When the suggestion display is shown with the demonstration image in this way, the player can face the game after finding out which of the production designs is the specific one having a high probability of shifting to the special game state, even without understanding the meaning of the production design during the game.

[0021]

According to the sixth form of the invention, it is possible to prepare a recording medium in which a game program is recorded, which program having a function of permitting a player to play a game by displaying game-related designs including the special symbols and the production designs as described above, to which function is added another function of showing a suggestion display of the relationship between the production design and the probability, so that the player

can use the program for example in a home game machine to enjoy the same game as with the above-described game machine. It is also possible to install the program from the recording medium to a general purpose personal computer for example and utilize the personal computer as a game machine.

[0022]

[Embodiment of the Invention]

Here will be described a pachinko game machine as an embodiment of the invention.

[0023]

FIG. 1 is a front view of the game board 10 of the pachinko game machine. A liquid crystal display device 3 as a means for displaying designs related to games is placed in about the center of the game board 10. The liquid crystal display device 3 variation-displays plural symbols expressed with images to show three rows of reels of a slot machine in simulated manner. The variation-displayed symbols are termed "special symbols." The special symbol, if its variation display stops at a specific stop arrangement (such as a stop arrangement "7-7-7" which is termed a "big hit"), indicates a shift to a special game state favorable for the player.

[0024]

In the liquid crystal display device 3, various production displays during the variation display of the special symbols are performed. The production displays include an omen production design representing a "big hit probability" of shifting to the abovementioned special game state or a "Reach evolution probability" of evolving to the Reach state, or a Reach state production design displayed in the Reach state which may shift to the above-mentioned special game state if one more stop occurs. These omen production

design and Reach state production design are expressed in various image forms.

# [0025]

In this embodiment, as shown in FIG. 2(a), special symbols constituted with stylized numerical symbols etc. are displayed in the display zones 50L, 50C, and 50R in the upper part of the display screen 3a of the liquid crystal display device 3. In other display zones are displayed the above-mentioned omen production designs and Reach production designs as production displays. The special symbols are images, expressed with electric signals, of the symbols on the three reels of rotary reels of a slot machine. The omen production designs and Reach production designs are displayed also with animated pictures and letters etc. as well as with designs. In FIG. 2 are shown a male character 51 and a female character 52 as omen production designs. [0026]

The omen production design heralds either that the variation display of the special symbol thereafter becomes a Reach state or that the variation display stops after reaching a Reach state at a specific state indicating a "big hit" such as "7-7-7." The omen production design is constituted to change into various display states. In this embodiment, the male character 51 and the female character 52 as omen production designs chat with each other, physically move each other, or evolution of a specific story is displayed with changes of the background. That is, depending on how the story evolves, probabilities of a big hit and evolving into a Reach state change.

#### [0027]

Therefore, the player can predict to some extent the probability of evolving into a Reach state or the appearance of a big hit thereafter by recognizing along which scenario the contents displayed with the

omen production design are evolving and by grasping the development of a story.

[0028]

Further, it is arranged that, in case a Reach state is reached, a Reach state production design separate from the omen production design is displayed as a production display for informing the player of reaching that state. The Reach state production design is shown in the course of the evolving story and its display manner is made different according to the big hit probability.

[0029]

The contents of display on the display screen 3a are described below using specific examples.

[0030]

When the game starts on the display screen 3a, as shown in FIG. 2(a), the variation display of the specific symbols begins on display zones 50L, 50C, 50R. Next, a male character 51 and a female character 52 as omen production designs come into the scene from the left and the right of the display screen 3a respectively. And both characters 51 and 52 stand close to each other (Fig.2 (b)).

[0031]

After that, when the variation display in the left display zone 50L stops, a word design 53a representing the words the male character 51 speaks to the female character 52 and a true (real) intention design 54a of the male character 51 (Fig.2 (c)) are displayed. Here, the word design 53a of the male character 51 is shown as "You wanna sleep with me, yeah?" The true intention design 54a displayed here shows that the true intention of the male character 51 is almost the same as the contents of the word design 53a.

[0032]

In succession, when the variation display in the right display zone 50R stops, a word design 55a representing the words the female character 52 speaks back to the male character 51 and a true intention design 56a representing the true intention of the female character are shown (FIG. 2(d)). Here, the word design 55a of the female character 52 is shown as "That's what I'm gonna say!" and the true intention design 56a shows that the true intention of the female character 52 is almost the same as the contents of the word design 55a. In some cases, the true intention design is different in contents from the word design, namely the words do not in agreement with the true intention. Such a case is shown for example in FIG. 2(f) in which the true intention design is 56b when the true intention design 56a is shown. When the word design is in disagreement in the contents with the true intention design, the big hit probability thereafter is low. [0033]

As shown in FIG. 2 (d), a Reach state is reached with the same stop symbols in the right and left display zones 50R and 50L, and it shifts to a Reach production. However, if the stop symbols in the right and left display zones 50R and 50L are not the same each other as shown in FIG. 2 (f), a miss results. In case of such a miss, the word design 55b shows a harsh contents such as "Go away, bozo!"

# [0034]

When it shifts to the Reach production with the display "Reach" as shown in Fig.2 (e), the displays as shown in Fig.3(g)-(f) follow. That is, after the shift to the Reach production, the story about whether the two, male and female characters check in the hotel evolves to express the Reach production. If the final display indicates that the male and female characters check in the hotel, the game results in a big hit with the three display zones 50L, 50C, and 50R showing

the same designs. That is, if the male and female characters do not check in the hotel as shown in Fig.3 (h), the game results in a miss. [0035]

As described above, in the production display of this embodiment, two, male and female characters appear and the story evolves. There are plural types of male and female characters appearing as the production displays respectively and their combinations (types of couples) are made to represent different Reach evolution rates and big hit probabilities.

[0036]

FIG. 4 shows the male and female characters appearing during the production display, and Reach evolution rate and big hit probability for each combination of them.

[0037]

In FIG. 4, in case that the male-female combinations are indicated with black hearts, the combinations of male and female characters are called "the best couples." Their Reach evolution rate is 100 %, namely the game evolves to a Reach state with a probability of 100 %, and their big hit probability is 15.182 % which is higher than other couples in probability of evolving to a big hit. Here, the couple appearing in the display examples in the above Figs. 2 to 3 is the combination of the male character "Saitoh" and the female character "Honjo" in FIG. 4, which is one of the best couples.

[0038]

In case that the male-female combinations are indicated with white hearts, the combinations of male and female characters are called "normal couples," with a Reach evolution rate of 18.575 %, and a big hit probability of 0.391 %, both lower than those of the best couples.

[0039]

The male-female combinations indicated with broken hearts are called "worst couples," with a Reach evolution rate of 2.002 %, namely little probability of evolving to a Reach state, and a big hit probability of a very low 0.020 %. Here, as seen in FIG. 4, the female characters "Takarada" and "Ohara" are not included in any of the best couples or the normal couples.

[0040]

There may be a case as shown in FIG. 5(m) in which a train design 57 passes across the background of the scene where the male and female characters appear, or a case as shown in FIG. 5(n) in which a dog design 58 appears. These are the omen production designs indicating the Reach evolution rate and the big hit probability. In this embodiment, the passage of the train design 57 and the appearance of the dog design 58 are very rare. Therefore, if they appear, the big hit probability is 100 %.

[0041]

Again referring to FIG. 1, a startup win hole 4 for a game ball to enter and start variation display of the special symbols of the liquid crystal display device 3 is provided below the liquid crystal display device 3. The startup win hole 4 comprises a variable prize device convertible to a first state unfavorable for the player and a second state favorable for the player. It is designed that, when a game ball enters the hole 4, a specified number (for example five) of prize balls are dispensed.

[0042]

The startup win hole 4 has a prize space that can hold a game ball or two even in the first state unfavorable for the player, and so a ball can enter the hole.

#### [0043]

An LED display device 2 having seven segments is provided above the liquid crystal display device 3. The LED display device 2 starts a variation display when a game ball passes through passage ball gates 6a, 6b located on the game board 10. When the variation display of the LED display device 2 stops at a predetermined specific state, for example "7," the startup win hole 4 is converted to the second state favorable for the player.

#### [0044]

Four LED operation memory lamps 16 are provided around the LED display device 2. The LED operation memory lamps 16 memorizes the number, up to four, of passages of game balls through the passage ball gates 6a, 6b every time the ball passes, and notifies the player of the number of variations, possible at that time, of the LED display device 2. The fifth and later passages are not counted and become invalid.

#### [0045]

Four startup win memory lamps 15, two for each of right and left sides, are provided above the liquid crystal display device 3. This is arranged to memorize the number of wins, up to a limit of four, with balls entering the startup win hole 4 while the variation display is being performed with the liquid crystal display device 3, and to notify the player of the number of variation displays that can be shown on the liquid crystal display device 3 at that time by causing the startup win memory lamps 15 to be on. Therefore, in the state of all the four lamps 15 being lit, a ball entry into the startup win hole 4 is invalid as a variation display startup condition.

#### [0046]

A big win hole (so called "attacker") 5 convertible to either

a closed state disadvantageous to the player or an open state advantageous to the player is provided below the startup win hole 4. The big win hole 5 comprises a variable win device of a type having doors and convertible to an open state advantageous to the player when the variation display of the special symbols on the liquid crystal display device 3 stops to show a specific combination of the special symbols, a "big hit." It is arranged that when a game ball enters the hole 5, a specified number (for example 15) of prize balls are dispensed.

The afore-mentioned special game state is the game state of permitting 16 rounds of a big hit game with the big win hole 5 open until 10 balls enter the hole or 30 seconds elapse. However, in order to play a next round after the first round of big hit game is over, a specific condition, generally called "V win" must be met.

# [0047]

Here, the big win hole 5 is constituted with plural win holes. The V win is the case in which a game ball enters specific one of the plural win holes. The specific win hole is usually set in the center of the big win hole 5.

#### [0048]

On the game board 10 are further provided, pin wheels 12a, 12b, general win holes 13a, 13b, 13c, 13d, 13e, 13f for dispensing five prize balls to the player for every entry of a win ball, and board side lamps 14a, 14b.

#### [0049]

FIG. 6 is a block diagram of an electric circuit part of the pachinko game machine of the invention.

#### [0050]

As shown in FIG. 6, the electric circuit part of the pachinko

30, a relay circuit board 34, a symbol control circuit board 31, a voice control circuit board 32, and a prize ball control circuit board 33.

#### [0051]

The main circuit board 30 is constituted about a microcomputer with a central processing unit (CPU), a read-only memory (ROM), and a random access memory (RAM), readable and writable memory means. [0052]

The main circuit board 30 is connected to the relay circuit board 34 to which are connected the following components; a passage ball sensor 20 as a game ball detecting means for detecting game balls passing through the passage ball gates 6a and 6b described before, a start win ball sensor 22 for detecting balls entering the start win hole 4 described before, a big win ball sensor 25 for detecting balls entering the big win device 5 described before, a win ball sensor 21 for detecting balls entering the general win holes 13a, 13b, 13c, 13d, 13e, and 13f, an ejected ball sensor 23 for detecting balls ejected from a ball ejector (not shown), a return ball sensor 24 for detecting balls ejected but returned without reaching the game board. To the relay circuit board 34 are further connected actuators; an LED display device 2, a lamp display device 41 for connection to board side lamps 14a and 14b, the start win hole 4, and the big win device 5.

When the above sensors detect balls, their detection signals are inputted to the CPU in the main circuit board 30 to operate and control the respective actuators according to the input signals. Control orders are also transmitted to the symbol control circuit board 31, to the voice control circuit board 32, and to the prize ball control

circuit board 33.

[0054]

When a game is being played, if the passage ball sensor 20 detects a game ball passing through the passage ball gates 6a or 6b, and a detection signal is outputted, the microcomputer in the main circuit board 30 judges a win in response to the detection signal, and controls the display on the LED display device 2 according to the judgment result.

[0055]

When the start win sensor 22 detects a ball entering the start win hole 4 and outputs a detection signal, the microcomputer in the main circuit board 30 transmits a control signal to the symbol control circuit board 31 to carry out various settings for the game on the liquid display device 3 according to the detection signal, and controls the liquid display device 3 according to the judgment with the symbol control circuit board 31. Here, the symbol control circuit board 31 comprises, separately from the main circuit board, a CPU, a ROM, and a RAM. Control programs for the game played on the liquid display device 3 and graphic data necessary for the game are stored in the ROM in the symbol control circuit board 31.

[0056]

Based on the above detection of the game ball with the start win sensor 22, the microcomputer in the main circuit board 30 makes a judgment if the game resulted in a big hit. In case the judged result is a big hit, the big win device 5 is converted to the open state with the doors of the big win device 5 opened to facilitate game balls to enter.

[0057]

The voice control circuit board 32 is provided with various voice

data and produces voices with the speaker 40 according to control orders transmitted from the main circuit board 30.

#### [0058]

The prize ball control circuit board 33 operates a prize ball device 43 according to control orders transmitted from the main circuit board 30 according to each type of win, and dispenses game balls.

#### [0059]

Based on such Pachinko game machines, the pachinko game machine of this invention is further arranged to show various demonstration displays (hereafter 'demo displays' for short) when no variation display is shown on the liquid crystal display device 3. The demo display not only shows the flow of the entire game played on the liquid crystal display device 3 but includes important information related to the game.

#### [0060]

This demo display shows suggestion of relationship of various production displays appearing during the variation display to the Reach evolution rate and the big hit probability. Specifically the display shows the omen production designs constituted with the male and female characters, and suggests the presence of strong relationship between the omen production designs and the Reach evolution rate and the big hit probability.

#### [0061]

As described above, the omen production design shown with the combination of the male and female characters of the best couple has very high Reach evolution rate and high big hit rate. Here, what omen production designs have very high probabilities of Reach evolution and big hit is implicitly notified by the random display of the omen

production designs representing the couples during the demo display. That is, the demo display implicitly notifies the player of important information related to the game.

[0062]

[0063]

Therefore, the player, seeing the demo display repeatedly, is impressed with the couple of the characters appearing in the scene. As the player continues playing, the player becomes aware that the impressed couples are high in the Reach evolution rate and the big hit probability, and can have additional fun of anticipating the appearance of the best couple during the variation display. That is, notifying the player of the best couple not directly but implicitly, additional fun of finding information advantageous to the player is provided and the pleasure of the game is enhanced.

FIG. 7 shows combinations of the male and female characters for the best couples shown in FIG. 4. The best couple (I) is the combination of the male character "Saitoh" and the female character "Honjo," the best couple (II) is the male character "Akiba" and the female character "Ohta," the best couple (III) is the male character "Imada" and the female character "Kishimoto," the best couple (IV) is the male character "Suzuki" and the female character "Mamiya," the best couple (V) is the male character "Moroboshi" and the female character "Watanabe," the best couple (VI) is the male character "Ayakohji" and the female character "Edogawa," and the best couple (VII) is the male character "Kayama" and the female character "Yachigusa." These best couples appear randomly in the demo display.

[0064]

Specific situations of the demo display in which the above best

couples appear are shown in Figs. 8①-④. Here, a scene with a station plaza as a background is displayed on the display screen 3a and the above best couples pass right and left across the scene. As shown in this FIG. 8①-④, the contents of the display is likely to be overlooked by the players who do not know the meaning of the best couples. However, as the play goes on and the meaning is gradually understood, the contents of the demo display become very interesting to the player. [0065]

The female characters "Takarada" and "Ohara" without partners to make up the best couples shown in FIG. 4 are supposed to pass by themselves during the demo display. That the female characters "Takarada" and "Ohara" pass by themselves implies a very low probability of a big hit, which the player does not want.

[0066]

For those players who become aware that the demo display is implying important information on the game, additional pleasure is provided to seek more advantageous information. For example, in FIG. 95, the train design 57 passes through the background during the demo display, and in FIG. 96, a dog design 58 appears in front of the background during the demo display. Since the train design 57 and the dog design 58 correspond to the big hit probability of 100 % as described above, a new fun of play, namely the player's finding those, is added.

#### [0067]

As for beginners, if they become aware at an early stage that the demo display is suggesting important information on the game, they can face the game with adequate knowledge of the production display without acquiring much experience.

# [0068]

The above demo display on the liquid display device 3 may alternatively arranged to be shown at specific time intervals when no game is played on the liquid display device 3, or on demand by the player. Further alternatively, it may be arranged that the demo display is started when the symbol variation is not made continuously for a specific period of time on the liquid display device 3, and that the demo display is finished upon starting the symbol variation on the liquid display device 3.

[0069]

Also, as the display means, a display apparatus configured of an array of a number of LEDs, CRT, plasma display device and electro-luminescence device or the like may be used, as well as liquid crystal display device.

[0070]

Although the embodiments described are applied to a pachinko game machine, this invention may be also applied to other game machines, such as one including an electrical display device or any imaging device. The player can enjoy the game in a home game machine, using a game program capable to perform pseudo-operations of the pachinko game machine described above. It is also possible to install the program from the recording medium to a general purpose personal computer for example and utilize the personal computer as a game machine.

[Brief Description of Drawings]

[FIG.1]

A front view of the game board of a pachinko game machine as an embodiment of the invention.

[FIG.2]

A drawing showing a flow of display on the display screen.

[FIG.3]

A drawing of a continuation from FIG. 2, showing the flow of display on the display screen.

[FIG.4]

A drawing showing Reach evolution rate, big hit probability for every combination of male and female characters.

[FIG.5]

A drawing showing omen production designs of 100 % big hit probability.

[FIG.6]

A block diagram, showing an electric circuit constitution of a pachinko game machine.

[FIG.7]

A table of good couples.

[FIG.8]

A drawing showing an example of demonstration images on the display screen.

[FIG.9]

A drawing showing another example of demonstration images on the display screen.

[Explanation of the numeral]

1...Pachinko Game Machine, 2...LED display device, 3...liquid crystal display device, 3a... display screen, 4...startup win hole, 5...big win hole, 6a,6b... passage ball gate, 9...variable win device, 10...game board, 12a, 12b... pin wheels, 13a, 13b, 13c, 13d, 13e, 13f, 13g... general win holes, 14a, 14b...board side lamps, 15...startup win memory lamps, 16...LED operation memory lamps.

[Name of the document] ABSTRACT
[Abstract]

[Problem] To provide a game machine capable of making it possible for a player to learn the production contents without losing enjoyment of finding specific production displays showing beneficial information for the player is provided.

(Measure to Solve the Problem) A game machine of a first form of the invention is one comprising a display means 3a for displaying a special symbol indicating shifting to a special game state if a variation display stops at a specific state and also displaying a game-related designs including a production design indicating the probability of shifting to the special game state. The display means 3a performs a suggestion display of relationship between the production design and the probability of shifting to the special game state.

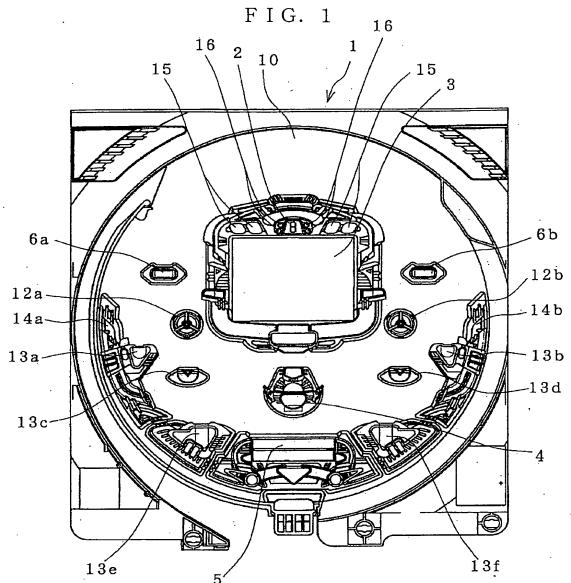
[Selected Drawing] FIG. 8

[Name of Document]

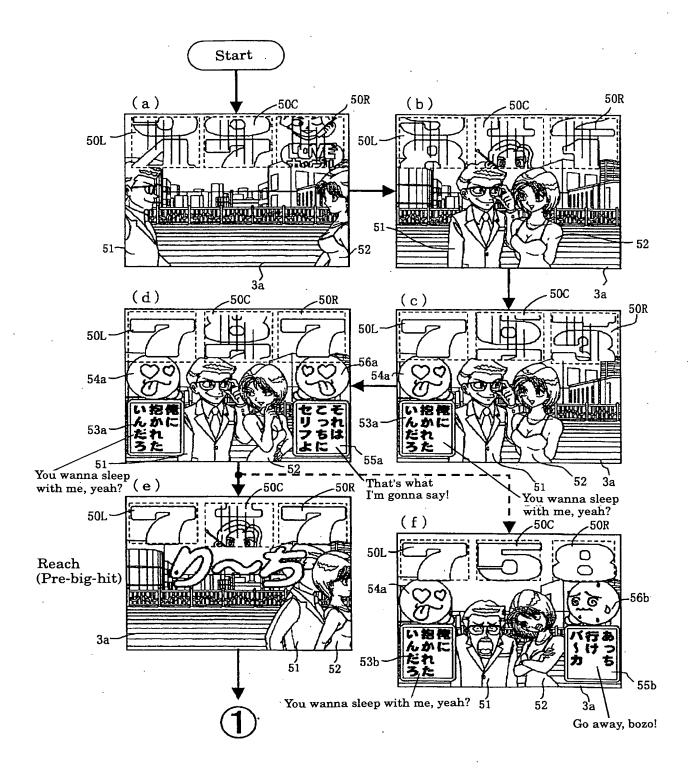
Drawing

[FIG. 1]



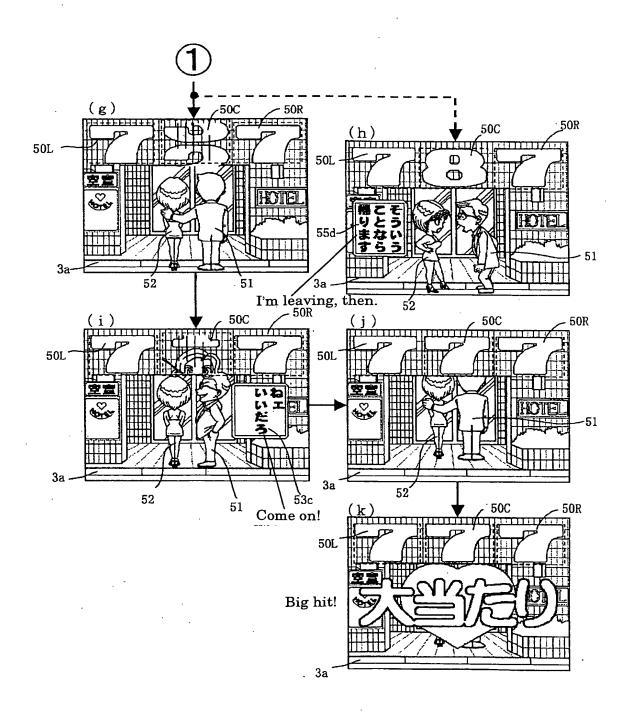








F I G. 3



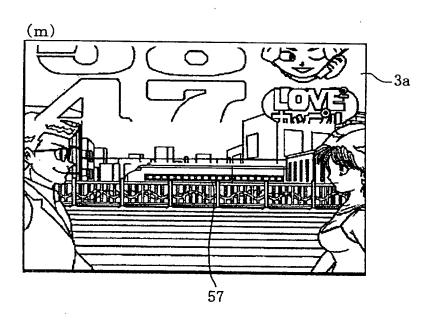


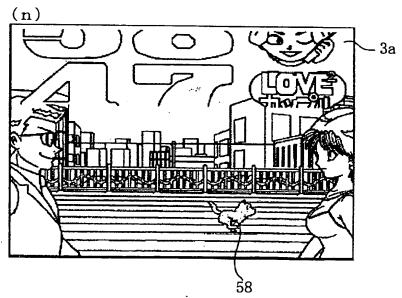
		Ohara		Creek Trans	( Fr The State of Sta	( For the	( For the	( To the state of	Craw of the state	Constant of the Constant of th
	٠	Takarada		Grand Ly	( Fr Fr	( Fr Tr	(Fright	(Ly Ly)	(F. F. F.)	Trans
		Yachigusa		Constant of the Constant of th	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\Diamond$	$\bigcirc$	(VII)
	racters	Edogawa		$\Diamond$	$\Diamond$	$\bigcirc$	$\bigcirc$	$\Diamond$	(VI)	(Far tay)
4	female cha	Watababe		$\triangleright$	$\bigcirc$	$\triangleright$	$\triangleright$	<b>3</b> (N)	(FF TY)	$\bigcirc$
FIG.	s) of male-i	Mamiya		$\triangleright$	5	8	<b>S</b> (VI)	(L. L. A. S.	$\Diamond$	$\bigcirc$
	from the combinations (couples) of male-female characters	Kishimoto		$\Diamond$	8		Grand Land	8	$\Diamond$	$\bigcirc$
	combinatic	Ohta		8	<b>3</b> (ii)	Surrey Surrey	8	5	5	8
		Honjo		<b>1</b>	Grand Stranger	5	5>	5	5	8
	Omen derived	3.48	Male Cost	<b>(</b>			E P	<b>4</b> 20		W,
	Om	Ž	Micha	Gaitoh	Akiba	gbaml	izluzud	Moroboahi	ildozievA	Кауата

	Best couple		Normal couple		Worst couple
	Reach evolution probability		Reach evolution probability		Reach evolution probability
_	: 100%	3	: 18.575%	<u>ح</u> جر	: 2.002%
	Big hit probability: 15.182%	>	Big hit probability: 0.391%		Big hit probability: 0.020%
	Occurrence rate: 0.718%	>	Occurrence rate: 45.630%	<u> </u>	Occurrence rate: 53.651%



# FIG. 5

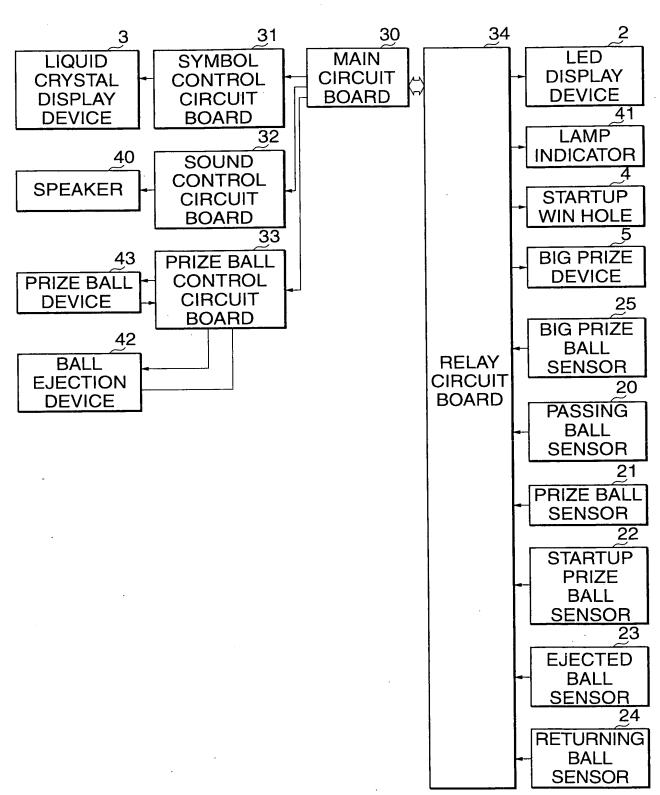




.



FIG. 6

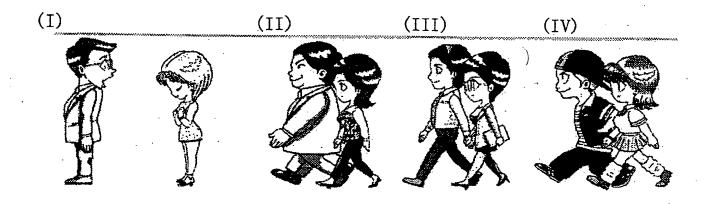


•



# F I G. 7

Best couples



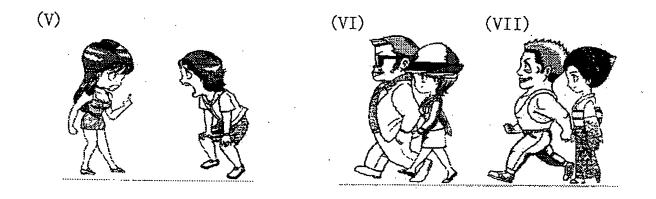
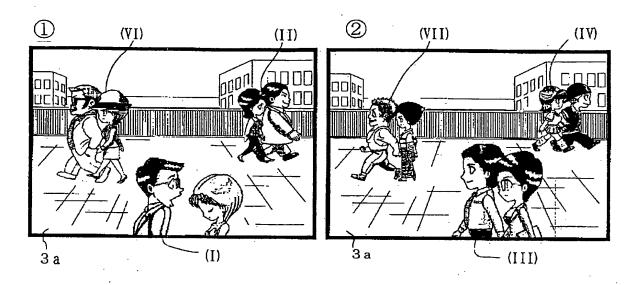
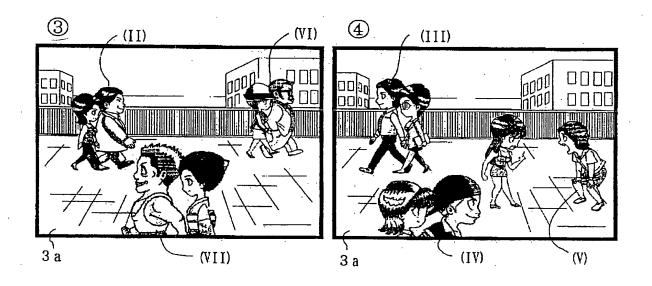




FIG. 8





-

-



FIG. 9

